Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

1. (currently amended) A method for establishing a wireless data connection between wireless communication devices in an ad hoc wireless mesh network, comprising:

sending from a first wireless communication device a channel clearance assessment message over a first channel in an ad hoc wireless mesh network;

determining that the first channel is not available;

sending a channel clearance assessment message over a second channel in the ad hoc wireless mesh network;

determining that the second channel is available; ~~and~~

~~sending a data communication to a second wireless communication device over the second channel in the ad hoc wireless mesh network.~~

sending a request to send message over a control channel to a second wireless communication device, the request to send message comprising a communication channel identifier representing the second channel;

receiving at the second wireless communication device the request to send message;

parsing the request to send message at the second wireless communication device to determine the second channel;

sending from the second wireless communication device a clear to send message over the control channel in response to the request to send message; and

sending a data communication from the first wireless communication device to the second wireless communication device over the second channel; and

receiving at the second wireless communication device a data communication from the first wireless communication device on the second channel.

2. (cancelled)

3. (original) A method for increasing throughput in an ad hoc wireless mesh network having a plurality of wireless communication devices, comprising:

sending a clear channel assessment message on a first channel in an ad hoc wireless mesh network;

determining that the first channel is busy;

sending a clear channel assessment message on a second channel in the ad hoc wireless mesh network;

determining that the second channel is available; and

sending a data communication frame on the second channel.

4. (original) The method of claim 3, wherein the data communication frame is one frame of an internet protocol datagram comprising a plurality of frames.

5. (original) The method of claim 3, further comprising executing a high bandwidth application over the wireless mesh network.

6. (original) The method of claim 3, further comprising executing a high bandwidth protocol over the wireless mesh network.

7. (original) The method of claim 6, wherein the high bandwidth application is for security.

8. (original) The method of claim 6, wherein the high bandwidth application is for building automation.

9. (original) The method of claim 6, wherein the high bandwidth application is for energy management.

10. (original) The method of claim 6, wherein the high bandwidth application is for supply chain management.

11. (original) The method of claim 6, wherein the high bandwidth application is for logistics.

12. (original) The method of claim 6, wherein the high bandwidth application is for sensor data.

13. (original) The method of claim 6, wherein the high bandwidth application is a data streaming application.

14. (original) The method of claim 13, wherein the data streaming application comprises streaming video.

15. (original) The method of claim 13, wherein the data streaming application comprises streaming audio.

16. (original) The method of claim 15, wherein the data streaming application comprises voice data.

17. (original) The method of claim 6, wherein the high bandwidth application is a multi-player gaming application.

18. (original) The method of claim 17, wherein the multi-player gaming application comprises real-time voice data.

19. (original) The method of claim 5, wherein the high bandwidth application is a voice call.

20. – 26. (cancelled)